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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,474	09/26/2003	Kook-yeol Yoo	Q77738	7408

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EXAMINER

CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/670,474	Applicant(s) YOO, KOOK-YEOL	
	Examiner Dave Czekaj	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 27-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/26/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 27-30 are rejected under 35 U.S.C. 101 because the claims do not meet the 35 U.S.C. 101 requirements (the claims have improper language regarding the computer readable medium). Please see the USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" in the Official Gazette notice of 22 November 2005. Note Annex IV Computer-Related Nonstatutory Subject Matter. The Annex states that "computer-readable medium encoded with (stored thereon, embedded with or embodying) a computer program", should be recited in the claim in order to be considered statutory. Linking words such as including, comprising, listing and having, are not acceptable as a substitute term for "encoded with".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 27, 28, and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Hibi et al. (6275532), (hereinafter referred to as "Hibi").

Regarding claim 27, Hibi discloses an apparatus that relates to a video coding device (Hibi: column 9, lines 10-12). This apparatus comprises "performing an affine motion estimation to obtain affine motion parameters" (Hibi: column 19, lines 55-65), "converting the affine motion parameters to a predetermined number of translational motion vectors" (Hibi: column 19, lines 3-8; column 20, lines 15-20, wherein the bilinear interpolation method performs the converting), and "coding the difference between the converted translational motion vectors of a current block and the converted translational motion vectors of a previous block" (Hibi: column 22, lines 40-50).

Regarding claim 28, note the examiners rejection for claim 27.

Regarding claim 30, Hibi discloses "receiving encoded data" (Hibi: figure 4, wherein the decoder receives the encoded data), "decoding the received data to obtain translational motion vectors" (Hibi: figure 4, item 1142, wherein the motion vector interpolating portion outputs the translational motion vectors), and "converting the translational motion vectors to affine motion parameters and performing motion compensation using the obtained affine parameters" (Hibi: figure 4; column 19, lines 55-65; column 20, lines 21-23; column 28, lines 24-37. The examiner notes the decoder of Hibi will perform the complimentary operations of the corresponding encoder).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hibi et al. (6275532), (hereinafter referred to as "Hibi") in view of Bober (6944227), (hereinafter referred to as "Bober").

Regarding claim 29, note the examiners rejection for claim 28, and in addition, claim 29 differs from claim 28 in that claim 29 further requires quantizing the vectors to fixed point numbers. Bober teaches that it is well known to quantize motion vectors to either full or sub-pel accuracy and differentially encode the result (Bober: column 1, lines 20-24). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the quantization taught by Bober in order to send large amounts of data over limited bandwidth networks.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US-6404815	06-2002	Sekiguchi et al.
US-5886742	03-1999	Hibi et al.
US-5982438	11-1999	Lin et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJC

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SUPERVISORY PATENT EXAMINER
TC 2600